

Office of
Aeronautics and
Space
Technology

UNIVERSITY PROGRAM

Presentation to

AIAA/OAST Conference on Space Technology

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SPACE R&T STRATEGY

OAST

REVITALIZE TECHNOLOGY FOR LOW EARTH ORBIT APPLICATIONS

DEVELOP TECHNOLOGY FOR EXPLORATION OF THE SOLAR SYSTEM

MAINTAIN FUNDAMENTAL R&T BASE

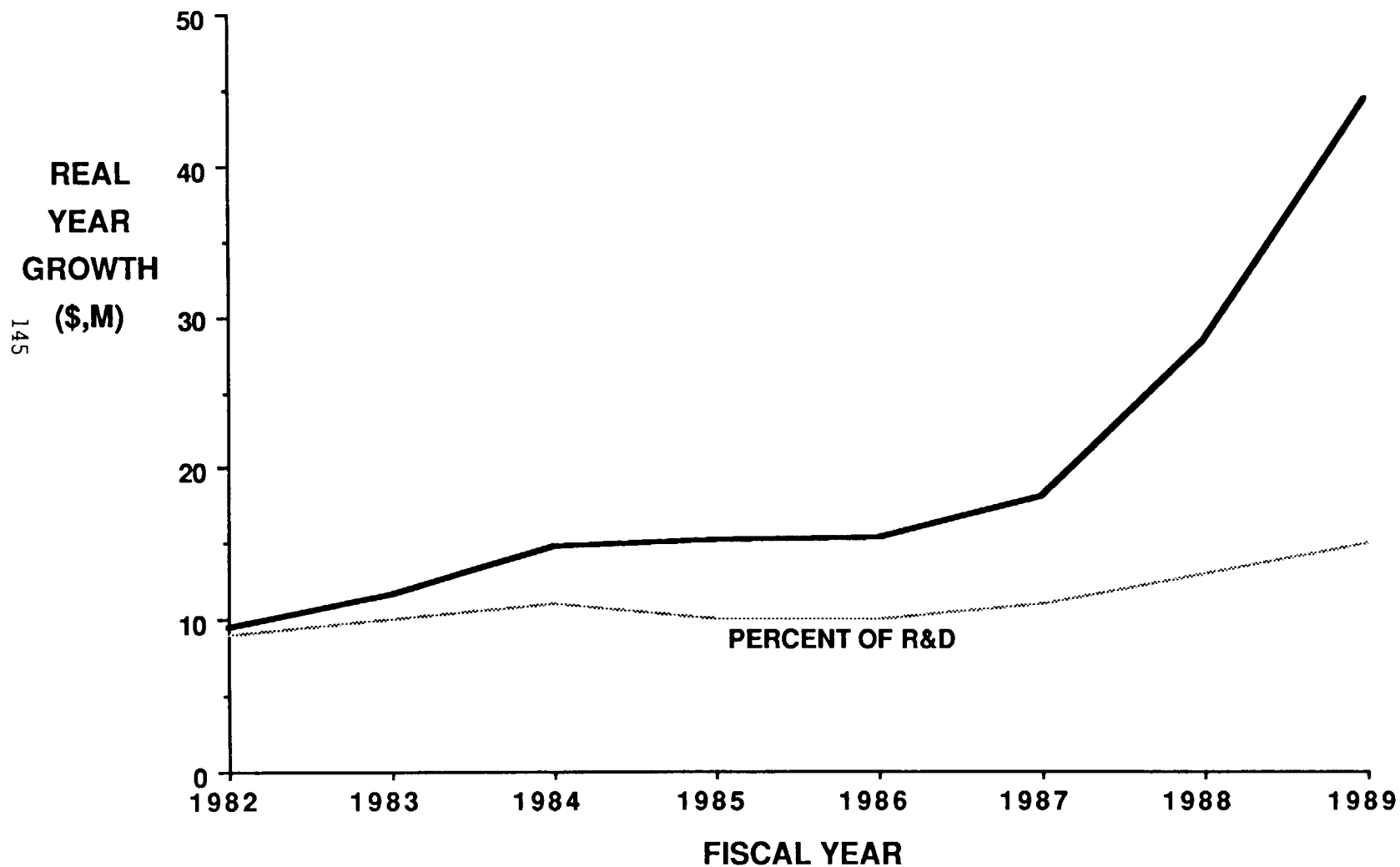
BROADEN PARTICIPATION OF UNIVERSITIES

EXTEND TECHNOLOGY DEVELOPMENT TO IN-SPACE EXPERIMENTATION

FACILITATE TECHNOLOGY TRANSFER TO USERS

OAST UNIVERSITY PROGRAM GROWTH (SPACE)

OAST



OAST UNIVERSITY PROGRAMS

OAST

BASIC RESEARCH GRANTS

RESEARCH INSTITUTES

JOINT UNIVERSITY INSTITUTES

CENTERS OF EXCELLENCE

AEROSPACE ADVANCED DESIGN PROGRAM

HYPersonic TRAINING AND RESEARCH PROGRAM

STATION UTILIZATION - TECHNOLOGY OUTREACH

GRADUATE PROGRAM IN AERONAUTICS

UNIVERSITY SPACE ENGINEERING RESEARCH PROGRAM

OAST UNIVERSITY PROGRAMS

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**BROADEN THE CAPABILITIES OF THE NATION'S
ENGINEERING COMMUNITY TO PARTICIPATE
MORE EFFECTIVELY IN THE U.S. CIVIL SPACE
PROGRAM**

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WHAT WE ARE DOING DIFFERENTLY:

MORE EFFICIENT USE OF ANNOUNCEMENTS OF OPPORTUNITY

INDEPENDENT OPPORTUNITIES TO CONTRIBUTE INNOVATIVELY

PEER REVIEW

LONG-TERM FUNDING

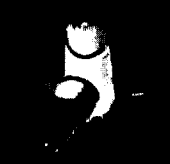
STRONGER INDUSTRY/UNIVERSITY PARTNERSHIPS WITH NASA

UNIVERSITY SPACE ENGINEERING RESEARCH PROGRAM

***Proposal for
University Space
Engineering
Research Program***



***Tech
University***



UNIVERSITY SPACE ENGINEERING RESEARCH PROGRAM

OAST

GRANTS UP TO \$1-2M PER YEAR FOR A MINIMUM OF 4 YEARS

FLEXIBLE SO UNIVERSITIES ARE FREE TO BE INNOVATIVE

**CENTER CONCEPT FOR MULTI-DISCIPLINARY RESEARCH
AND EDUCATION**

**COLLABORATIVE ACTIVITY INVOLVING NASA CENTERS
AND INDUSTRY**

FUNDING SUPPORT TO U.S. STUDENTS ONLY

UNIVERSITY SPACE ENGINEERING RESEARCH PROGRAM

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CRITERIA:

STRENGTH OF EXISTING ENGINEERING PROGRAM

QUALITY OF THE PROPOSED SPACE RESEARCH

POTENTIAL IMPACT

MANAGEMENT AND COMPETENCE

GROWTH POTENTIAL

UNIVERSITY SPACE ENGINEERING RESEARCH PROGRAM

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EVALUATION PROCESS

- **PEER REVIEW**

- EACH PROPOSAL ASSIGNED 5 REVIEWERS
- RESEARCHERS FROM NASA, INDUSTRY, UNIVERSITIES,
OTHER GOVERNMENT AGENCIES

- **STEERING COMMITTEE**

- STANDARDIZED REVIEW OF ALL PROPOSALS
- WORKING GROUP INTERMEDIATE PROCESS
- SITE VISITS
- RECOMMEND SELECTIONS

- **SELECTION OFFICIAL**

UNIVERSITY SPACE ENGINEERING RESEARCH PROGRAM

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NINE CENTERS SELECTED FOR FY 1988

- UNIVERSITY OF ARIZONA – CENTER FOR UTILIZATION OF LOCAL PLANETARY RESOURCES
- UNIVERSITY OF CINCINNATI – HEALTH MONITORING TECHNOLOGY CENTER FOR SPACE PROPULSION SYSTEMS
- UNIVERSITY OF COLORADO, BOULDER – CENTER FOR SPACE CONSTRUCTION
- UNIVERSITY OF IDAHO – VERY LARGE SCALE INTEGRATED HARDWARE ACCELERATION CENTER FOR SPACE RESEARCH
- MASSACHUSETTS INSTITUTE OF TECHNOLOGY – CENTER FOR SPACE ENGINEERING RESEARCH FOCUSED ON CONTROLLED STRUCTURES TECHNOLOGY
- UNIVERSITY OF MICHIGAN – CENTER FOR NEAR-MILLIMETER WAVE COMMUNICATION
- NORTH CAROLINA STATE AT RALEIGH & NORTH CAROLINA AGRICULTURAL AND TECHNICAL STATE UNIVERSITY – MARS MISSION RESEARCH CENTER
- PENNSYLVANIA STATE UNIVERSITY – CENTER FOR SPACE PROPULSION ENGINEERING
- RENSSELAER POLYTECHNIC INSTITUTE – INTELLIGENT ROBOTIC SYSTEMS FOR SPACE EXPLORATION

UNIVERSITY SPACE ENGINEERING RESEARCH PROGRAM

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COLLABORATIVE ACTIVITIES:

EXCHANGE OF PERSONNEL

FACILITY USE

STUDENT RESEARCH

ADVISORY SERVICES

TECHNICAL EXCHANGES

ETC.

